

10/58481U

IAP11 Rec'd PCT/PTO 28 JUN 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Donald J. Graham et al.

Serial No. to be assigned

Filed:

For: HCV RNA-DEPENDENT RNA POLYMERASE

Art Unit: _____

Examiner: _____

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR 1.97**

Sir:

1. In compliance with 37 C.F.R. 1.97, submitted on the attached form herewith is a list of patents, publications or other information which are requested to be made of record in this application. This Information Disclosure Statement is not an admission that any patent, publication or other information referred to herein is "prior art" for this invention. In accordance with 37 C.F.R. 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56(b).

2. In accordance with 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

3. Applicants respectfully request that the Examiner initial the attached form after reviewing the pertinence of each reference.

4. Pursuant to 37 C.F.R. 1.98 (a)(2)(ii), copies of each cited U.S. patent and each U.S. patent application publication are not enclosed herewith.

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MERCK & CO., INC.

By _____ Date _____

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PATENT Case No. 21471P

INFORMATION DISCLOSURE STATEMENT

5. Pursuant to 37 C.F.R. 1.98(d), copies of references listed on the attached form that were submitted to or cited by the Office in a related application upon which the instant application relies for an earlier filing date under 35 U.S.C. 120 are not enclosed. Related application(s) in which references were submitted to or cited by the Office are as follows:

RELATED APPLICATION		
U. S. SERIAL NUMBER	FILING DATE	MERCK CASE

If this is inconvenient, additional copies will be submitted upon request.

6. In accordance with 37 C.F.R. 1.97, (check one)

- the attached information is filed within three months of the filing date of the captioned case.
- the attached information is filed more than three months after the filing date but prior to the mailing of a first Office Action on the merits.
- the attached information is filed before the mailing of a first Office action after the filing of a request for continued examination under §1.114.
- the attached information is being filed more than three months after the filing date and after the mailing of a first Office Action on the merits, but before the mailing date of a Final Action, Notice of Allowance, or an action that otherwise closes prosecution in the application. The enclosed authorization is therefore given to charge Deposit Account No. 13-2755 for the fee required under 37 C.F.R. 1.17(p).
- each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement.
- each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart application and *this communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of the information disclosure statement.*
- no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated under 37 C.F.R. 1.56(c) more than three months prior to the filing of this Statement.

Respectfully submitted,

By: Sheldon O. Heber

Attorney _____ For Applicant(s)

Reg. No. 38,179

MERCK & CO., INC.

Patent Dept., RY60-30

P.O. Box 2000

Rahway, N.J. 07065-0907

(732)594-1958

Date: 6-28-06

Approved for use through 7-1-2000. GMB
0500 (0-95) Information Disclosure Statement by
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INFORMATION DISCLOSURE		Application Number JAP11 Rec'd PCT/PTO 28 JUN 2008	
STATEMENT BY APPLICANT		Filing Date	
(use as many sheets as necessary)		First Named Inventor	Donald J. Graham
		Group Art Unit	
		Examiner Name	
Sheet	1	of	4
		Attorney Docket Number 21471P	

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

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15941
IAP1 Rec'd PCT/PTO 28 JUN 2006

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INFORMATION DISCLOSURE**STATEMENT BY APPLICANT**

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Sheet	2	of	4	Attorney Docket Number	21471P
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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
	A	NCBI, AF177036 Hepatitis C virus... [gi:6010579] Oct 5, 1999
	B	NCBI, P26661 Genome polyprotein [gi: 130468] June 15, 20002
	C	NCBI, D17763 Hepatitis C Virus [gi: 514395] February 4, 1999
	D	Bartenschlager et al. 'Nonstructural Protein 3 of the Hepatitis C Virus... at the NS3/4 and NS4/5 Junctions', Journal of Virology, Vol 67, No. 7, pp 3835-3844 July 1993
	E	Beaulieu, et al. 'Non-Nucleoside Inhibitors of the Hepatitis C Virus NS5B...Benzimidazole Derivatives', Bioorganic & Medicinal Chemistry Letters, Vol. 14 pp 119-124 (2004)
	F	Behrens et al. 'Identification and Properties of the RNA-Dependent RNA Polymerase of Hepatitis C Virus, EMBO, Vol 15, No. 1, pp 12-22 (1996)
	G	Carroll, et al.. 'Inhibition of Hepatitis C Virus RNA Replication by 2'-Modified Nucleoside Analogs', Journal of Biological Chemistry, Vol. 278, No. 14, Issue of April 4, pp 11979-11984 (2003)
	H	Choo et al., 'Isolation of a cDNA Clone Derived from a Blood-Borne Non-A, Non-B Viral Hepatitis Genome', Science, Vol. 244pp 359-361, (April 1989)
	I	De Francesco et al. 'RNA-Dependent RNA Polymerase of Hepatitis C Virus', Methods in Enzymology, Vol. 275, pp 58-67,
	J	Farci et al. 'Clinical Significance of Hepatitis C Virus Genotypes and Quasispecies', Seminars in Liver Disease, Vol. 20, No. 1, pp 103-125 (2000)
	K	Ferrari, et al. 'Characterization of Soluble Hepatitis C Virus RNA-Dependent RNA Polymerase Expressed in Escherichia coli', Journal of Virology, Vol. 73, No. 2, pp 1649-1654 (Feb 1999)
	L	Grakoui, et al. 'A Second Hepatitis C Virus-Encoded Proteinase', Proc. Natl. Sci. USA, Vol 90, pp 10583-10587 (November 1993)
	M	Huikata, et al. 'Proteolytic Processing and Membrane Association of Putative Nonstructural Proteins of Hepatitis C Virus, Vol. 90, pp 10773-10777 (November 1993)
	N	Kolykhalov et al. 'Transmission of Hepatitis C by Intrahepatic Inoculation with Transcribed RNA', Science, Vol. 277 pp 570-574, (July 25, 1997)
	O	Kuo et al., 'An Assay for Circulating Antibodies to a Major Etiologic Virus of Human Non-A, Non-B Hepatitis', Science, Vol 244, pp 362-364 (1989)

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Application Number	IAP11 REC @ PCU/PDU 20 JUN 2006
Filing Date	
First Named Inventor	Donald J. Graham
Group Art Unit	
Examiner Name	

Sheet **3** of **4** Attorney Docket Number **21471P**

NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
	P	Leveque et al. 'Identification of a C-Terminal Regulatory Motif in Hepatitis C Virus RNA-Dependent RNA Polymerase: Structural and Biochemical Analysis', Journal of Virology, Vol 77, No. 16, pp 9020-9028 (August 2003)
	Q	Lohmann et al. 'Biochemical and Kinetic Analyses of NSB RNA-Dependent RNA Polymerase of the Hepatitis C Virus', Virology, Vol. 249, pp 108-118 (1998)
	R	Luo et al. 'De Novo Initiation of RNA Synthesis by the RNA-Dependent RNA Polymerase (NS5B) of Hepatitis C Virus', Journal of Virology, Vol. 74, No. 2, pp 851-863 (January 2000)
	S	Migliaccio et al. 'Characterization of Resistance to Non-Obligate Chain-Terminating Ribonucleoside Analogs that Inhibit Hepatitis C Virus Replicaiton in Vitro', Journal of Biological Chemistry, Vol. 278, No. 49, Issue of December 5, pp 49164-49170 (2003)
	T	Mizushima et al. 'Analysis of N-Terminal Processing of Hepatitis C Virus Nonstructural Protein 2', Journal of Virology, Vol. 68, No. 4 pp 2731-2734 (April 1994)
	U	Oh, et al. 'A Recombinant Hepatitis C Virus RNA-Dependent RNA Polymerase Capable of Copying the Full-Length Viral RNA', Journal of Virology, Vol. 73, No. 9, pp 7694-7702 (Sept. 1999)
	V	Okamoto et al. 'Full-length Sequence of a Hepatitis C Virus Genome Having Poor Homology ... of Four Distinct Genotypes', Virology, Vol. 188, pp 331-341 (1992)
	W	Regenmortel et al. Seventh Report of the International Committee on Taxonomy of Viruses; Virus Taxonomy - Classification and Nomenclature of Viruses, Academic Press, p 876 (2000)
	X	Sakamoto et al. "Entire Nucleotide Seuence and Characterization of a Hepatitis C Viirus of Genotype V/3a', Journal of General Virology, Vol. 75, Pt 7, pp 1761-1768 (1994)
	Y	Shim et al. 'Canonical 3'-deoxyribonucleotides as a Chain Terminator for HCV NS5B RNA-dependent RNA Polymerase', Antiviral Research, Vol. 58, pp 243-251 (2003)
	Z	Takamizawa et al. 'Structure and Organization of the Hepatitis C Virus Genome Isolated from Human Carriers', Journal of Virology, Vol . 65, No. 3, pp. 1105-1113 (March 1991)
	AA	Tomei, et al. 'NS3 Is a Serine Protease Required for Processing of Hepatitis C Virus Polyprotein', Journal of Virology, Vol. 67, No. 7, pp 4017-4026 (July 1993)
	AB	Walker et al. 'HCV RNA-dependent RNA Polymerase as a Target for Antiviral Development', Current Opinion in Pharmacology, Vol. 2, pp 1-7 (2002)
	AC	Yamashita et al. 'RNA-dependent RNA Polymerase Actiivty of the Soluble Recombinant ...C-terminal Region', Journal of Biological Chemistry, Vol. 273, No. 25, Issue of June 19, pp 15479-15486 (1998)
	AD	Yanagi, et al. 'Transcripts from a Single Full-length cDNA Clone of Hepatitis C Virus ... the Liver of a Chimpanzee', Proc. Natl. Acad. Sci. USA, Vol. 94, pp 8738-8743 (August 1997)

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